

REMARKS

The examiner objects to claim 11 because "cementitious mixture" is not positively claimed in the parent claim 1. In response, claim 11 has been canceled without prejudice. Accordingly, withdrawal of the objection is requested.

Claims 1-3, 5-20, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,515,655 to Hoffmann ("Hoffmann").

In response, claim 1 has been amended. The amended claim 1 now recites:

A telescoping pier foundation system comprising:
a stationary portion of a hollow structure having a solid sidewall and a top end opening;
 at least one telescoping member of a hollow structure having, a top open end and a bottom open end, in longitudinal alignment with the stationary portion, residing within the top end opening of the stationary portion and longitudinally movable within the top end opening and extendable through the top end opening;
 and
 at least one fill port for receiving a cementitious mixture, wherein the stationary portion and the telescoping member form an outer shell defining an internal cavity in communication with the at least one fill port for receiving the cementitious mixture.

The underlined portion of claim 1 is now amended to recite that the stationary portion is a hollow structure having a solid sidewall. Because the stationary portion must retain the cementitious mixture within its structure during curing, its sidewall cannot have any openings which would allow the uncured cementitious mixture to leak out from the stationary portion. This amendment is fully supported by the disclosure of the originally filed Specification. The support can be found, for example, in the illustrations shown in FIGs. 1, 1B, and 3. No new matter has been added by this amendment.

In contrast, the stationary portion 30 of the support system 10 of Hoffmann requires a plurality of holes 34 through which the fastener means 44 is inserted in order to lock the

telescoping portion 28 and the stationary portion 30. (Hoffmann at column 7, lines 31-35; FIGs. 1 and 4). Therefore, the disclosure of Hoffmann does not teach or suggest at least the stationary portion required in claim 1.

In addition, there is no showing of motivation provided in Hoffman, either explicitly or impliedly, to modify the structure of the stationary portion 30 of Hoffmann to arrive at the structure claimed in amended claim 1. In fact, the operational purpose and the requisite structure of the support system 10 of Hoffmann actually teaches away from the invention of claim 1. In Hoffman, first and second members 28 and 30 are designed to be locked to each other by the fastener means 44 so that the resulting locked structure can bear the load of the structure above. The plurality of holes 34 in the second member 30 (corresponding to the stationary portion of the telescoping pier foundation system of claim 1) must be present to receive the fastener means 44. If there were no holes provided in the stationary portion 30, the two members 28 and 30 could not be locked together as required by the disclosure of Hoffman. The first and second members 28 and 30 of Hoffmann are specifically and intentionally designed to form a load bearing support structure by themselves by locking the two members together with the fastening means 44 which is inserted through one of the plurality of holes 34 in the second member 30 and one of the plurality of holes 32 in the first member 28. Hoffmann's disclosure does not provide, either explicitly or impliedly, a need or motivation to fill the internal cavity of the support system 10 with cementitious mixture.

Accordingly, Applicant believes that amended claim 1 is patentably distinguishable from Hoffmann. Withdrawal of the rejection of claim 1 and its allowance are requested.

Claims 2, 3, 6-20, and 22 depend from claim 1, which is allowable over the cited references. Thus, claims 2, 3, 6-20, and 22 are also allowable over the cited references. Withdrawal of the rejection of these claims and their allowance are requested.

Claim 21, which depends from claim 1, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoffmann in view of U.S. Patent No. 5,363,610 to Thomas ("Thomas"). This rejection is traversed in view of the amendment to the base claim 1 submitted herein.

The Examiner combined the teachings of Hoffmann and Thomas to modify the support system 10 of Hoffmann in rejecting claim 21. However, as discussed above, Hoffmann does not teach or suggest the telescoping pier system recited in amended claim 1 and Hoffmann does not provide, either explicitly or impliedly, any showing of motivation to modify the support system 10 of Hoffmann to have a stationary portion having a solid sidewall as required by amended claim 1. The teachings of Thomas do not correct this deficiency. Thus, because claim 21 depends ultimately from claim 1 and it would not have been obvious to have modified the teachings of Hoffmann to disclose the invention recited in amended claim 1, Hoffmann and Thomas can not properly be combined to obviate the invention recited in claim 21.

Accordingly, claim 21 is allowable over Hoffmann and Thomas. Withdrawal of the rejection and allowance of claim 21 are requested.

Claim 4, which depends from claim 1, is rejected under 35 U.S.C. § 103(a) as being obvious over Hoffmann in view of U.S. Patent No. 3,795,465 to Burkland ("Burkland"). This rejection is traversed in view of the amendment to the base claim 1 submitted herein.

The Examiner combined the teachings of Burkland to modify the support system 10 of Hoffmann in rejecting claim 4. However, as discussed above, Hoffmann does not teach or

suggest the telescoping pier system recited in amended claim 1 and Hoffmann does not provide, either explicitly or impliedly, any showing of motivation to modify the support system 10 of Hoffmann to have a stationary portion having a solid sidewall as required by amended claim 1. The teachings of Burkland do not correct this deficiency. Thus, because claim 4 depends from claim 1 and it would not have been obvious to have modified the teachings of Hoffmann to disclose the invention recited in amended claim 1, Hoffmann and Burkland can not properly be combined to obviate the invention recited in claim 4.

Accordingly, claim 4 is allowable over Hoffmann and Burkland. Withdrawal of the rejection and allowance of claim 4 are requested.

Claims 23 and 34-38 are also rejected under 35 U.S.C. § 103(a) as being obvious over Hoffmann in view of Burkland.

In response, independent claim 23 has been amended. The amended claim 23 now recites:

A composite pier foundation for supporting a structural member of a building structure comprising:
 an outer shell comprising:
 a stationary portion of a hollow structure having a solid sidewall
 and a top end opening;
 at least one telescoping member of a hollow structure having a top open end and a bottom open end, in longitudinal alignment with the stationary portion, residing within the top end opening of the stationary portion, longitudinally movable within the top end opening and extendable through the top end opening;
 at least one fill port for receiving a cementitious mixture, wherein the stationary portion and the telescoping portion form the outer shell defining an internal cavity in communication with the at least one fill port for receiving the cementitious mixture; and
 a core of cured cementitious material substantially filling the internal cavity.

The underlined portion of claim 23 is now amended to recite that the stationary portion of the outer shell is a hollow structure having a solid sidewall. Because the stationary portion must retain the cementitious mixture within its structure, its sidewall cannot have any openings. This amendment is fully supported by the disclosure of the originally filed Specification. The support can be found, for example, in the illustrations shown in FIGs. 1, 1B, and 3. No new matter has been added by this amendment.

As discussed above in reference to amended claim 1, the stationary portion 30 of the support system 10 of Hoffmann does not disclose a stationary portion having a solid sidewall and the teachings of Hoffmann can not properly be modified to arrive at the structure claimed in amended claim 23. The operational purpose and the requisite structure of the support system 10 of Hoffmann actually teaches away from the claimed structure.

Additionally, contrary to the Examiner's assertion, the cited references do not provide the proper motivation, either explicitly or impliedly, to modify the support system 10 of Hoffmann and fill the internal cavity with cementitious material such as concrete as suggested by the Examiner. The hollow first and second members 28 and 30 of support system 10 of Hoffmann do not form an outer shell for a composite structure as in the Applicant's invention. The first and second members 28 and 30 of Hoffmann are specifically and intentionally designed to form a load bearing support structure by themselves by locking the two members together with the fastening means 44 which is inserted through one of the plurality of holes 34 in the second member 30 and one of the plurality of holes 32 in the first member 28. Hoffmann's disclosure does not provide, either explicitly or impliedly, a need or motivation to fill the internal cavity of the support system 10 with cementitious mixture to form a composite pier foundation.

In fact, the cementitious mixture would leak out through the several holes 32 and 34 provided in the first and second members 28 and 30, respectively (see FIGs. 1 and 4), which are

required for the operation of the support system 10, and it would not be desirable nor obvious to fill the support system 10 of Hoffmann with cementitious mixture. And because the several holes 32 and 34 of the support system 10 of Hoffmann are necessary for the support system 10 to function properly, it would not have been obvious to modify the support system 10 as suggested by the Examiner.

Accordingly, Applicant believes that amended claim 23 is patentably distinguishable from Hoffmann. Withdrawal of the rejection of claim 23 and its allowance are requested.

Claims 34-38 depend from claim 23 which is allowable over the cited references Hoffmann and Burkland. Withdrawal of the rejection of claim 34-38 and their allowance are requested.

Claims 24-33, which depend from claim 23, are rejected under 35 U.S.C. § 103(a) as being obvious over Hoffmann in view of Burkland and further in view of U.S. Patent No. 3,630,474 to Minor ("Minor"). This rejection is traversed in view of the amendment to the base claim 23 submitted herein.

The Examiner combined the teachings of Burkland and Minor to the teachings of Hoffmann modify the support system 10 of Hoffmann in rejecting claims 24-33. However, as discussed above, Hoffmann and Burkland do not teach or suggest the composite pier foundation recited in amended claim 23 and it would not have been obvious to modify the support system 10 of Hoffmann by combining the teachings of Hoffmann and Burkland to arrive at the composite pier foundation of amended claim 23. And the teachings of Minor does not correct the deficiency of Hoffmann and Burkland with respect to the amended claim 23. Thus, because

claims 24-33 depend from claim 23, Hoffmann, Burkland and Minor whether taken singly or in combination do not teach or suggest the invention recited in claims 24-33.

Accordingly, claims 24-33 are allowable over the cited references. Withdrawal of the rejection and allowance of claims 24-33 are requested.

Claims 39 and 40 are also rejected under 35 U.S.C. § 103(a) as being obvious over Hoffmann in view of Burkland and further in view of Minor. This rejection is traversed in view of the amendments to claims 1 and 23 submitted herein.

The Examiner states that “Hoffmann, Burkland, and Minor teach the structural elements for the pier support system as stated except for the method steps of installing a telescoping pier foundation system as taught by the applicant, examiner considers this to be the obvious method of setting up device. . . .” But, as discussed above, the cited references, whether taken singly or in combination, do not teach or suggest the telescoping pier foundation system or the composite pier foundation recited in claims 1-38 as amended. Thus, the method steps of claims 39 and 40 are not obvious in view of the cited references.

Withdrawal of the rejection of claims 39 and 40 and their allowance are requested.

After the entry of the amendments submitted herein, claims 1-10 and 12-40 remain pending. A favorable reconsideration of this application is respectfully requested as it is believed that the pending claims, as amended, are allowable over the cited references. Should there be any questions or matters whose resolution may be advanced by a telephone call, the examiner is cordially invited to contact applicants’ undersigned attorney at his number listed below.

This response is being submitted within the statutory three (3) months period and no fee is believed due. If any fee is due, however, the Commissioner is hereby authorized to charge Duane Morris deposit account No. 50-2061.

Respectfully submitted,



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